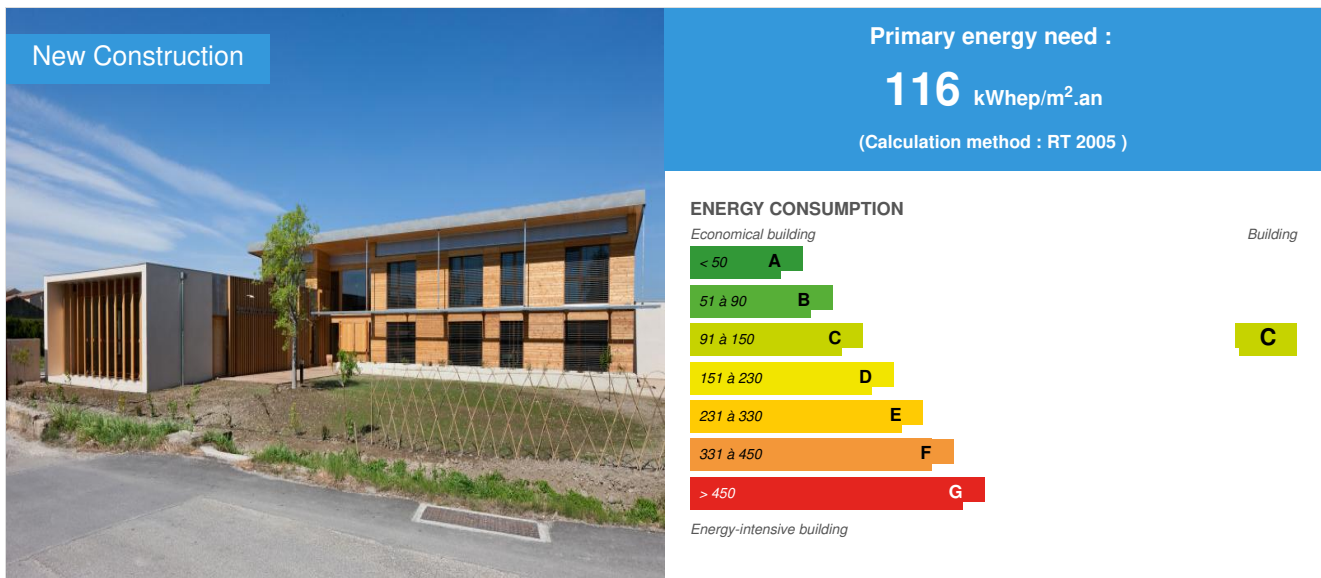


## Local water authority in Sorgue

by Nicolas Guignard / 2013-05-22 11:32:38 / France / 5575 / FR



**Building Type** : Office building < 28m  
**Construction Year** : 2011  
**Delivery year** :  
**Address 1 - street** : Avenue des Palermes 84320 ENTRAIGUES SUR LA SORGUE, France  
**Climate zone** :

**Net Floor Area** : 513 m<sup>2</sup> SHON  
**Construction/refurbishment cost** : 777 000 €  
**Cost/m2** : 1514.62 €/m<sup>2</sup>

**Certifications :**



### General information

The former water authority building, made of prefabricated metal had become gradually unsuitable for their function. The team was gradually enlarged and they did not have a meeting room large enough for their inter-communal activity.

In 2007, along with the town, the water authority wanted to make a pilot site with further environmental approach, built on an innovative plot. Gathering housing and commercial functions on the site opened new opportunities for a single heating and cooling system, shared by all activities. It would work the day priority activities tertiary and evening for housing. The new building has yet to play sobriety, with natural lighting and optimal bioclimatic orientations, high isolation and management of internal comfort perfectly controlled.

### Sustainable development approach of the project owner

Sorgues local water authority manages the network of Sorgues, about 500 km of waterways. Its main objective is the coherence between development along its rivers, upstream to downstream. The authority is in charge of the edge of the river maintenance, including the slaughter of diseased trees and their replacement,

maintenance of hydraulic structures, the regulation of coypus or invasive plants. It therefore plays an important role on the landscape and territorial aspect of the region. It is involved in the elaboration of local urbanism documents and Natura 2000 operator. Now it carries out land acquisition to preserve such wetlands. Finally, the authority is leading the program river contract "The Sorgue 2010-2015." These activities justify the construction of a building consistent with these new activities.

## Architectural description

South facing East / North West, the building is in the axis of the prevailing winds and avoid summer solar gains are difficult to control, that could cause significant overheating. The openings are arranged so as to optimize the contribution of natural light. The north and west facades are very few breakthroughs to protect themselves from the prevailing winds. The main entrance to the Northwest, is protected by a wall.

## See more details about this project

<http://www.enviroboite.net/bureaux-le-syndicat-mixte-du-bassin-des-sorgues-sorgues-84>

## Stakeholders

### Stakeholders

Function : Contractor

SMBS

M Rhodet - 04 90 83 68 25

Function : Assistance to the Contracting Authority

A4 architecture

1 impasse de la Pinède - La Gavotte 13170 Les Pennes Mirabeau

Function : Construction Manager

Agence d'Architecture Frédéric Nicolas

171 avenue Eugène Baudouin 84400 APT

## Energy

### Energy consumption

Primary energy need : 116,00 kWh/m<sup>2</sup>.an

Primary energy need for standard building : 230,00 kWh/m<sup>2</sup>.an

Calculation method : RT 2005

### Envelope performance

Envelope U-Value : 0,55 W.m<sup>-2</sup>.K<sup>-1</sup>

More information :

Mixed structure Monomur 30 cm / prefabricated structure made of wooden boxes, cotton cellulose insulation / cladding wooden openwork nails

Building Compactness Coefficient : 7,00

## Renewables & systems

### Systems

Heating system :

- Geothermal heat pump
- Fan coil
- Tape

Hot water system :

- Individual electric boiler

#### Cooling system :

- Others
- Fan coil

#### Ventilation system :

- Nocturnal ventilation
- Single flow
- Double flow heat exchanger

#### Renewable systems :

- Heat pump (geothermal)

## Environment

### Urban environment

This building is the first in this area, constituted of mixed functions and pooling some resources (geothermal heat pumps for heating and cooling), in direct proximity to the center of Entraigues city.



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